

Multilayered Oscillating Functional Surface

ABSTRACT OF THE DISCLOSURE

A multilayered torsional hinged scanning mirror including a hinge layer with a mirror attaching member pivotally supported by torsional hinges. A mirror layer is bonded to the front side of the attaching member and a back layer is bonded to the back side of the attaching member. The mirror layer and the back layer are equal in mass and weight to balance the moment of inertia and stresses on the torsional hinges. The back layer may be a permanent magnet if the mirror oscillating drive is a magnetic drive. Alternately, the back layer may be another silicon slice.